IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re The Application of:)
    Kui Zhang et al.   )
)
Serial No.: 09/345,193   )   Examiner: Jain, Raj K. **RECEIVED**
)
Filed: June 30, 1999   )   **FEB 0 3 2004**
)   Art Unit: 2664
For: A SYSTEM AND METHOD)   Technology Center 2600
    FOR MEASURING LATENCY)
    OF A SELECTED PATH OF A)
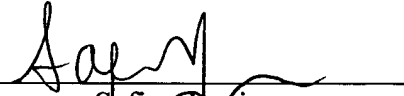   COMPUTER NETWORK   )

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January 26, 2004

CERTIFICATE OF MAILING

I hereby certify that the following paper is being deposited with the United States Postal Service as first-class mail in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on January 26, 2004.

Safiya Jarvis

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

REMARKS

These remarks are being submitted in response to the Office action dated September 26, 2003. All objections and rejections are respectfully traversed.

In the Office action, claims 1-7, 13, 14, 18-20 were rejected under 35 U.S.C. §103 as being obvious based on U.S. Patent 6,185,219 to Christie ("Christie") in view of U.S.

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Patent 5,892,754 to Kompella et al. ("Kompella"). Claims 8-9 were rejected under §103

based on Christie in view of U.S. Patent No. 5,920,697 to Masters et al. ("Masters").

Claim 1, a method claim, recites in relevant part:

"utilizing **at least one path state set-up message** formulated by the first entity
and **passed <u>to each network node</u> along the selected path** to establish a path state at
each network node along the selected path for identifying a traffic flow having predefined
parameters, and for forwarding messages matching the predefined parameters of the traf-
fic flow to a next downstream network node along the selected path".

The Office action at p. 2 cites to three places in Christie as disclosing this ele-

ment, i.e., Col. 1, lines 55-67, Col. 5, lines 15-27 and claim 1. Applicants respectfully

submit that none of these portions of Christie teach or suggest the claimed feature.

At Col. 1, lines 55-67, Christie teaches a system whereby each switch along a

communication path signals to the next switch along the path. Applicants direct the Ex-

aminer's attention to Col. 1, lines 63-66, which states as follows:

"The first switch signals the second switch and establishes a connection between
the switches. The <u>second switch</u> then selects the next network element, signals
that network element, and establishes a connection to that network element."

That is, with Christie, each switch is only responsible for signaling the next switch along

the path. In contrast, claim 1 specifically recites that a path state set-up message is cre-

ated by the first entity and is passed <u>to each network node</u> along the selected path. Appli-

cants submit that Christie provides no such teaching.

At Col. 5, lines 15-27, Christie simply states that "signaling is the transfer of in-

formation among points and network elements". There is no teaching or suggesting for

formulating a path state set-up message at the first entity and then passing it to each net-

work node along the selected path.

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Christie's claim 1 is equally deficient. In fact, claim of Christie actually teaches away from the present invention. More specifically, claim 1 of Christie in relevant part recites:

> "receiving a set-up message for the call into a processor, **wherein the processor is <u>external</u> to devices on a communications path** for the call".

In other words, Christie's claim 1 teaches that the set-up message should be sent to a processor that is external to the devices making up the communications path. The claimed invention, on the other hand, is exactly the opposite. As quoted above, claim 1 of the present invention calls for a path state set-up message to be passed to <u>every</u> network node along the selected path.

Christie is also non-operable for the present invention. More specifically, Christie teaches a system in which two calls between the same two end points may nonetheless follow different paths. See Christie at Col. 1, lines 45-47 ("Typically, a plurality of different network element and connection selections may be possible for any one communications path between points.") In this case, measuring latency is meaningless because the actual communications path used for a given call may not be the same for which latency was measured. To the contrary, the present invention provides a solution to this problem by defining, ahead of time, the selected path, measuring the latency for this selected path, and then guaranteeing that subsequent messages will follow this path (assuming the measured latency is satisfactory).

Because Christie is non-operable for the present invention, and fails to teach or suggest the step of utilizing a path state set-up message formulated by the first entity

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along the selected path, and passed to each network node along the selected path to establish path state at each such network node, the rejection of claim 1 and of claims 2-7, which depend from claim 1, should be withdrawn.

Claim 8 similarly recites that the path state set-up message is passed to each network node along the selected path. Accordingly, the rejection of claim 8 and of claims 9-12, which depend from claim 8, should be withdrawn.

Independent claim 13 recites in relevant part as follows:

the "options processor and signaling processor cooperate **to implement a source routing option included in the path state setup message** by initializing a path state associated with the traffic flow and **forwarding the path state setup message to a next network node <u>as identified in the source routing option</u>**".

In other words, claim 13 recites a source routing option included within a path state setup message and the forwarding of that path state setup message to a next node as identified in the source routing option. Although the Office Action rejects claim 13 based on Christie and Kompella, there is no indication where these references teach or suggest such a feature. Applicants are unaware of any portion of either Christie or Kompella that teaches the insertion of a source routing option within a path state setup message. Indeed, Christie, which teaches a system in which each switch simply signals to the next switch along the communications path (as opposed to defining a route ahead of time and loading it into a path state setup message), teaches away from the present invention. Accordingly, Applicants submit that the rejection of claim 13 and of claims 14-17, which depend from claim 13 should be withdrawn.

Claim 18 similarly recites the insertion of a source routing option into a path state setup message that specifies ahead of time at least some of the nodes along the selected path so that the path state setup message will be forced to travel along the selected path. Accordingly, Applicants submit that the rejection of claim 18 and of claims 19-20 should be withdrawn.

Applicants submit that the application is in condition for allowance and early favorable action is requested.

Please charge any additional fee occasioned by this paper to our Deposit Account No. 03-1237.

Respectfully submitted,

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